Gulf of Mexico Harmful Algal Bloom Bulletin

26 December 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: December 20, 2007

Conditions Report

A harmful algal bloom persists in patches from Okaloosa County, Florida to Baldwin County, Alabama, and in Harrison County, Mississippi. Patchy moderate impacts are possible for the bay regions of Okaloosa County today through Sunday. Patchy low impacts are possible for bay regions of Baldwin County, Alabama today through Sunday; with patchy moderate impacts possible for coastal Baldwin County tonight, Thursday night, Friday and Sunday. Patchy very low impacts are possible for coastal Baldwin County Thursday and Saturday. Patchy very low impacts are possible in Escambia County, Florida and Harrison County, Mississippi tonight, Thursday night, Friday and Sunday. No other impacts are expected in northwest Florida, Alabama, or Mississippi today through Sunday, December 30.

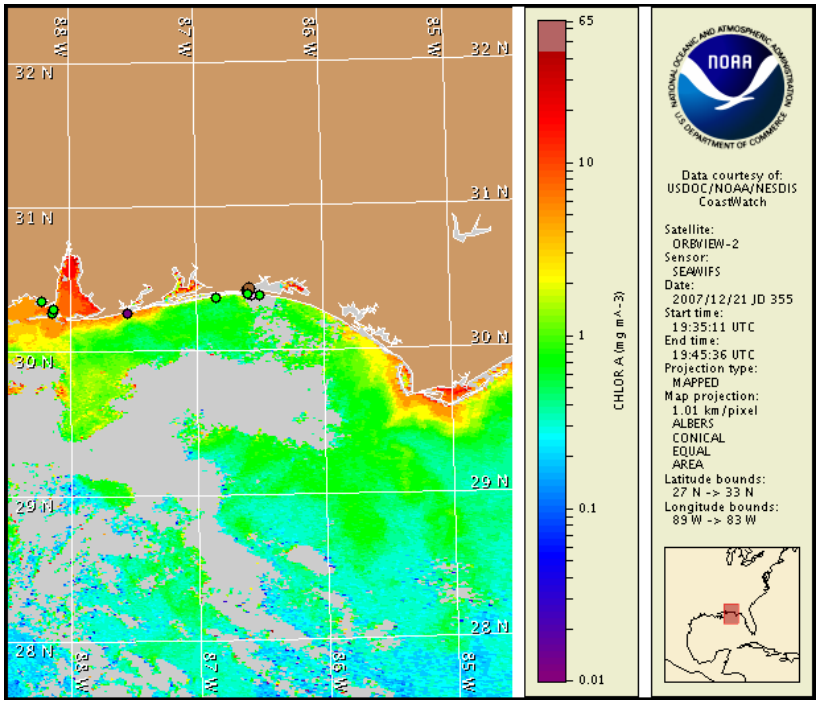
Analysis

A harmful algal bloom persists in patches from Okaloosa County, Florida to Baldwin County, Alabama, and in Harrison County, Mississippi. Recent samples from the bay regions of Okaloosa County, Florida indicate 'medium' concentrations of *Karenia brevis* (FWRI; 12/19). In Baldwin County, Mississippi samples indicate 'low a' concentrations of *K. brevis* in bay regions and 'medium' concentrations in coastal regions (Alabama Department of Public Health; 12/20). Most recent satellite imagery has been completely obscured by clouds in this region; however satellite imagery from 12/21 indicates that chlorophyll levels have declined from Bay to Santa Rosa County, Florida. Onshore Escambia County, Florida and Baldwin County, Alabama, chlorophyll levels are ~4 μg/L. Strong northeasterly winds may have transported the bloom further west over the past four days. Continued sampling is recommended. Reports of respiratory irritation have been received from Baldwin County, Alabama (Alabama Department of Public Health; 12/20).

Onshore winds today, Friday and Sunday will increase the potential for impacts in coastal regions. Intensification of the bloom is unlikely.

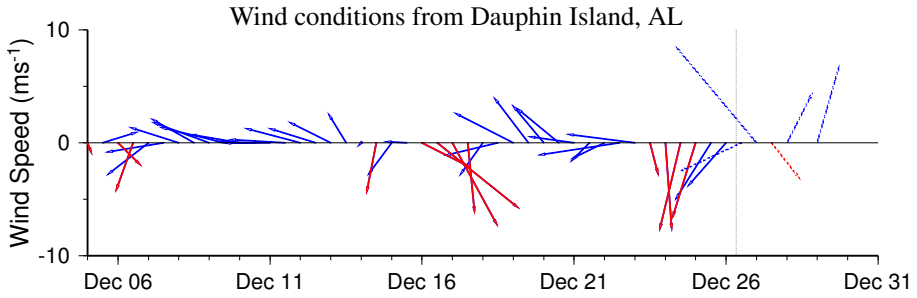
**** An updated conditions report for northwest Florida will be issued on Friday, December 28.**

Urizar, Fisher



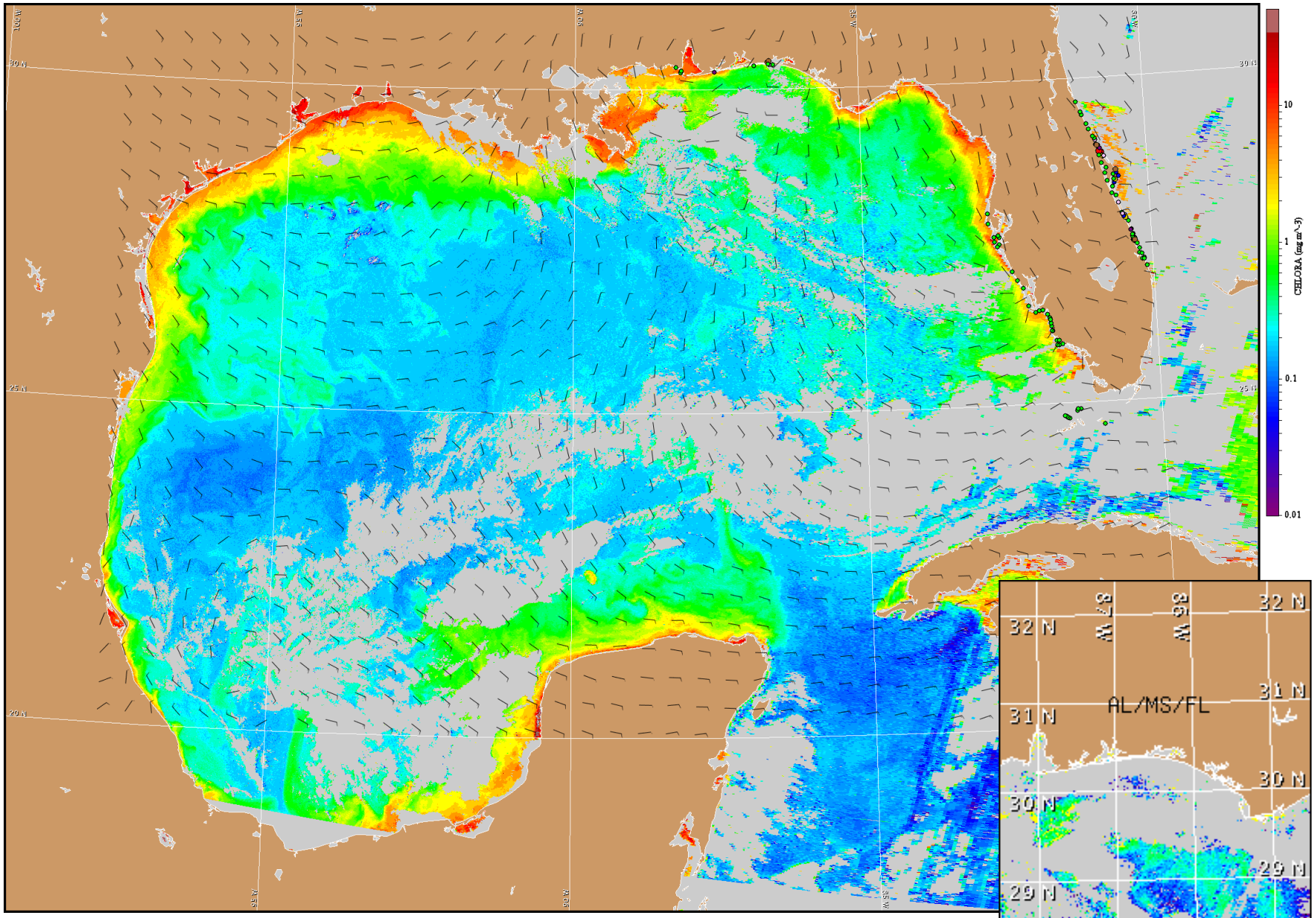
Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from December 17 to 20 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide:

http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf

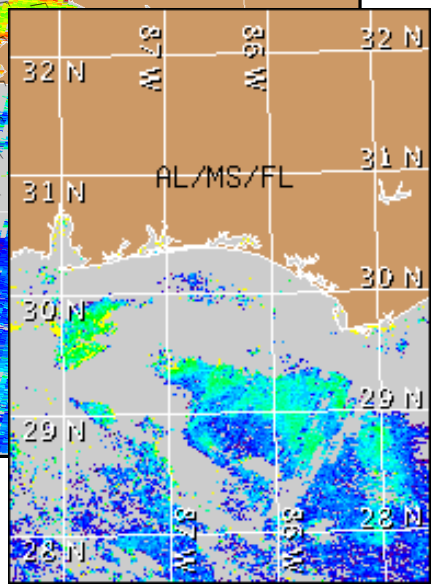


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

NW Florida: Southeasterly winds tonight (20-25kt, 10-13m/s). North to northeast winds Thursday (10-15kt, 5-8m/s), shifting east to southeast Thursday night (15-20kt, 8-10m/s). South winds Friday (15-20kt). Southwest winds becoming north (10-15kt) Friday night. North winds Saturday, becoming easterly (10kt). South winds Sunday (20-25kt) becoming west (10-15kt).

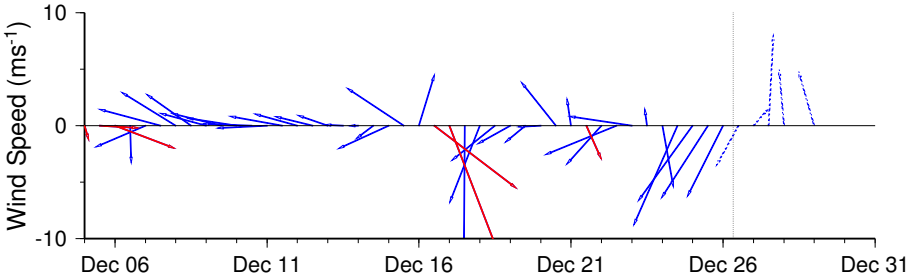


Satellite chlorophyll image and forecast winds for December 27, 2007 18Z with Cell concentration sampling data from December 17 to 20 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide: http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf



Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).

Wind conditions from Tyndall AFB Tower C



Wind conditions from Panama City, FL